

Dewey Loeffel Landfill

New York

EPA ID#: NYD000512335

EPA REGION 2

Congressional District(s): 29

Rensselaer

Nassau

NPL LISTING HISTORY

Proposed Date: 3/4/2010

Final Date: 3/10/2011

Site Description

The Dewey Loeffel Landfill (DLL) site is composed of an inactive hazardous waste disposal area and the releases from it into nearby surface water bodies, including the former Mead Road Pond, Tributary T11A, Valatie Kill, and Nassau Lake, and an underlying groundwater aquifer. The DLL facility is located in the Town of Nassau in southern Rensselaer County, New York and is located within a low-lying, 19.6-acre easement between two wooded hills.

From 1952 to 1968, Loeffel Waste Oil Removal and Service Company ("Loeffel") operated the DLL property as a disposal facility for waste materials generated by several industries. The General Electric Company (GE) reported that approximately 37,530 tons of waste materials from GE manufacturing facilities were deposited at the facility. The New York State Department of Environmental Conservation (NYSDEC) reported that at least 8,790 tons of waste materials were deposited at the facility from other industrial sources, including Bendix Corporation and Schenectady Chemicals, Inc. Waste materials, including solvents, waste oils, polychlorinated biphenyls (PCB), scrap materials, sludges, and solids, were dumped into a lagoon area, oil pit, and drum burial area. Some drum contents were pumped onto the ground surface, and waste materials were also burned during facility operations. In 1968, after several years of citizen complaints, the State of New York ordered Loeffel to stop discharges from the disposal facility and perform remedial activities. By 1974, Loeffel had covered and graded the disposal areas with soil and constructed drainage channels to control runoff. From 1974 to 1980, Loeffel continued to use four 30,000-gallon above-ground storage tanks (ASTs) at the facility for waste oil transfer. In 1980, GE entered into an agreement with NYSDEC to perform additional investigation and remediation at the facility. From 1982 to 1984, GE removed approximately 500 surface drums and the 30,000-gallon ASTs from the property, and installed a NYSDEC-approved slurry wall, clay cap, and leachate collection system. Since 1985, NYSDEC has overseen operation, maintenance, and monitoring activities at the DLL facility. NYSDEC designated three operable units (OUs) at the facility: OU1, the encapsulated disposal area; OU2, ground water contamination associated with the facility; and OU3, surface water releases downgradient of the facility. In January 2001, NYSDEC issued a Record of Decision (ROD) for OU2, and in January 2002, NYSDEC issued a ROD for OU3. GE has conducted remedial investigations and remedial actions associated with OU2 and OU3 since 1992. From 2001 to 2004, GE removed approximately 15,000 tons of PCB-contaminated soil and sediments from the drainageway between the facility and Nassau Lake, including the area immediately adjacent to the disposal facility, Mead Road Pond, Tributary T11A, and the Valatie Kill.

Threat and Contaminants

In the 1950s and 1960s, the Dewey Loeffel Landfill site property was used as a disposal facility for more than 46,000 tons of industrial hazardous wastes, including solvents, waste oils, polychlorinated biphenyls (PCB), scrap materials, sludges, and solids. Some hazardous substances, including volatile organic compounds (VOCs) and PCBs, have migrated from the facility to underlying aquifers and downstream surface water bodies, resulting in contamination of ground water, surface water, sediments, and several species of fish. There is currently a ban on fish consumption in Nassau Lake and the impacted tributaries.

A ground water plume has been traced to extend south of the Landfill to the vicinity of Central Nassau Road, approximately 1/2 mile from the Site. Four residential drinking water wells on Central Nassau Road and one north of the Site have been impacted by VOCs. The water from these wells is treated by point of use (POU) treatment systems installed, maintained, and routinely monitored by GE. Many other residential potable wells around the site are also routinely monitored by GE.

In 2010, GE began assessing the impacted residences along Central Nassau Road for potential VOC vapor intrusion concerns. Vapor intrusion is defined as vapor-phase migration of volatile organic compounds or volatile inorganic compounds into occupied buildings from underlying contaminated ground water or soil. The results of that evaluation

were prepared by GE and submitted to NYSDEC.

Cleanup Approach

On March 4, 2010, EPA proposed the Dewey Loeffel Landfill site for inclusion on the National Priorities List (NPL) following the completion of a Hazardous Ranking System analysis. Following the evaluation of public comments received regarding the proposal for NPL listing, the Site was placed on the NPL on March 20, 2011. Placement on the NPL switches the project lead to the EPA. The NYSDEC will retain an oversight role.

The EPA held a kickoff meeting on March 24, 2011 to announce the NPL listing and to introduce the EPA team and the Superfund process to the community.

The Remedial Investigation/Feasibility Study (RI/FS) is the first step of the cleanup process. The primary objectives of the RI/FS are to determine the nature and extent of contamination and the gather sufficient information so that the EPA can select a remedy that eliminates, reduces, or controls risks to human health and the environment. The EPA will build upon the work conducted by the NYSDEC and the Potentially Responsible Parties (PRP)s.

The EPA expects to enter into an agreement with the PRPs for the companies to conduct the RI/FS. At this time, the EPA has identified three PRPs for the Dewey Loeffel site: General Electric (GE), Bendix Corporation (now Honeywell) and Schenectady Chemicals (now SI Group). In the future, if any of the PRPs conduct work at the Site, such work would be conducted under a negotiated Administrative Order on Consent (AOC) or under a Unilateral Administrative Order (UAO), with EPA oversight.

In an effort to expedite the RI/FS process, the EPA has begun gathering data as part of an Initial Supplemental Site Investigation (ISSI), which will help inform the RI process moving forward, and will help to determine what additional information may be needed as part of the RI. The EPA may also perform the investigation in phases to further expedite the process.

The ISSI of the landfill and ground water contamination components of the Dewey Loeffel Superfund Site began shortly after the Site was added to the NPL.

Cleanup Progress

In April 2011, field crews completed magnetic and electromagnetic geophysical surveys of the landfill to assess the presence of residual sources of buried contamination in the landfill. Additional tests were conducted to evaluate the current integrity of the existing landfill cap by assessing the physical and geotechnical properties of the cap.

The Landfill Cap Investigation was initiated in May 2011. A total of 20 borings were advanced through the landfill to evaluate the thickness of the cap. Twenty subsurface landfill cap samples and 10 surface soil samples were collected, and submitted for geotechnical analyses.

In May, the EPA also identified the locations of five ground water monitoring wells to further evaluate ground water and contaminants. Well installation began in late June 2011 and was completed in mid-July 2011. Ground water samples and geophysical information were collected through September 2011. A report summarizing the results of the ground water investigations was released in April 2012. Based on the report findings, additional ground water investigations may be necessary. Additional details about this initial ground water and landfill investigation, were documented in the ISSI work plan.

In October 2011, the EPA's Removal Program began the operation (pumping) and maintenance of the ground water extraction wells and the leachate collection system. The EPA's actions also included winterization of the extraction well system to allow for year-round operation of the wells, and off-site disposal of the collected leachate and ground water. The winterization included the construction of a pole barn, placement of another collection tank, and a heating system.

In April 2012, the EPA reached an agreement with GE and SI Group to collect and properly dispose of contaminated ground water and leachate from the Dewey Loeffel site. According to the agreement, the companies will also design and construct a pump-and-treat system adjacent to the landfill to remove contaminants from the ground water and leachate, all with EPA oversight. The waste will continue to be sent off-site until the construction of the treatment system is completed. Treated water from the new system will be discharged to surface water only after the EPA verifies that sampling data shows that the treatment system is working effectively and is capable of meeting stringent discharge limits that were set by the NYSDEC. The treatment system to be constructed will address potential threats from the contaminated ground water and leachate and community concerns about trucking the contaminated liquid off-site.

The RI/FS will identify permanent cleanup options for the contaminated ground water, surface water and sediment

associated with the site. The permanent cleanup plan may include changes to the leachate collection, ground water extraction and treatment systems constructed at this time.

Site Repositories

EPA Region 2 Superfund Records Center, 290 Broadway - 18th Floor, New York, NY 10007-1866.

Nassau Free Library, 18 Church Street, Nassau, NY 12123 (518)766-2715